Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

_	
ATTORNEY'S DKT NO.	APPLICATION No.
032796-217	Unassigned
APPLICANT	
John P. CARULLI et al.	
FILING DATE	GROUP
December 10, 2002	Unaccioned

les a .			णक्ष्में एक्सम्बर्गः छ्ळा	UMENTS:		Mary H				
	U.S. Patent D	ocument								
Examiner Initials	Initials Number (if known)		Name of Patent of Cited D			Date of Publication (MM-DD-YYYY)				
CQ	5,691,153		Robert R. RECKER	et al.	11-25-1	997				
	6,545,137		Todd et al.		04-08-2	003				
V	6,555,659		Todd et al.		04-29-2	003				
				GNIENIOS:	AND TELEVISION	例的音				
Examiner	Foreign Patent	Kind Code			Date of Publication	Translation				
Initials	Number	(if known)	Country		(MM-DD-YYYY)	Yes no				
CO	WO 99/47529		PCT		09-23-1999					
1	WO 97/12903		PCT		04-10-1997					
	WO 99/09054		PCT		02-25-1999					
	WO 98/46743		PCT		10-1998					
		·								
	<b>-</b>									
		NONE	XZŲ AVŲ, (NIVI ŠTAZUMŲ)	E INGGUME	Viria de la Caración	ar a said				
					cle (when appropriate), title of	the				
Examiner Initials				atalog, etc.), d	ate, page(s), volume-issue nur					
CQ	Annex Form PCT/ISA/206 Communication Relating to the Results of the Partial International Search attached to Invitation to Pay Additional Fees dated May 7, 2001 in PCT/US00/16951 filed on June 21, 2000									
	A. COURSEAUX et ***, 3 Ordered Piec XP002165276, Abs	es", Database	iens Chromosome 11 Cla EM_HTG, E.B.I., Hinxton	ne BAC67-M-5 U.K., Accessi	5 MAP 11q13, *** Sequencin on Number: AC024123, Marc	g in Progress ch 2, 2000,				
		Miner. Res., V	ol. 13, No. 12, pp. 1903		Bone Mineral Density to Chron ber 1998, Blackwell Science,					
			Gene Defects that Cause ican Society of Human G		ass", Am. J. Hum. Genet., Vol	. 60; No. 6, pp.				
	the Amyloid Precurs	or Protein", J.			with Neuronal Apolipoprotein E 56-33560, December 1998, T					
			of Focal Adhesions by Os 1-269, September 1994,		ring to Different Substrata", Ess, Inc., USA	xperimental Cel				
		in Interactions "	, Am. J. Physiol., Vol. 27		n MC3T3-E1 Osteoblasts Requ pp. C1591-1601, December					
	Mark L. Johnson <i>et</i> Hum. Genet., Vol. 6	<i>al., "Linkage of</i> 60, No. 6, pp. 1	f a Gene Causing High Bo 326-1332, June 1997, 1	ne Mass to Hu The American S	<i>man Chromosome 11 (11q12</i> Society of Human Genetics, US	- <i>13)"</i> , Am. J. SA				
Hum. Genet., Vol. 60, No. 6, pp. 1326-1332, June 1997, The American Society of Human Genetics, US  Dong-Ho KIM et al., "A New Low Density Lipoprotein Receptor Related Protein, LRP5, is Expressed in Hey Adrenal Cortex, and Recognizes Apolipoprotein E", J. Biochem., Vol. 124, No. 6, pp. 1072-1076, Decem Japanese Blochemical Society, JAPAN										
Examiner	/Celine Q	ian/		Date	<u> </u>					
Signature		-		Considered	<u> </u>					

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Substitute for forms 1449A/PTÖ & 1449B/PTÖ	ATTORNEY'S DKT No. 032796-217	APPLICATION NO. Unassigned	
INFORMATION DISCLOSURE	APPLICANT John P. Carulli et al.		
STATEMENT BY APPLICANT	FILING DATE December 10, 2003	GROUP Unassigned	

			U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)					ation YY)
•							
		<del> </del>					
		<u> </u>					
		FO	REIGN PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publica (MM-DD-YYY		n Transl Yes	
iniuais	Number	(II KIIOWII)	Country	(IVIIVI-OD-1717	<del>''</del>		No
	<del></del>	<u> </u>		-			
					<del>-  </del>		
-			•				
•						.	
		NON P	ATENT LITERATURE DOCUMENTS				
	Indus		r (in CAPITAL LETTERS), title of the article (when	n appropriate) title	of the		
Examiner Initials	item (boo	k, magazine, jou	rnal, serial, symposium, catalog, etc.), date, page publisher, city and/or country where published.	(s), volume-issue r	number(s	s),	
CQ	JOHNSON ET AL., JOU	mal of Bone and	Mineral Research, 11 (Supplement 1):S255, abs	tract S661, August	1996		
	Human Genetics, 63	(2): 547-56 (Aug					nal of
	HEY ET AL., "Cloning	of a Novel Memb	per of the Low-Density Lipoprotein Receptor Fami	ly," Gene 216: 1:10	03-111 (	1998)	_
	Biochemical and Bio	physical Resear	Characterization of LR, Novel LDL Receptor Fan ch Communication, 251:(3) 784-90 (Oct 29, 1998)				r. 
	BOLLAG ET AL., "Oste Endocrinology, 141:		cells Express Functional Glucose-Dependent Insu	linotropic Peptide I	Recepto	rs",	
			uced Osteoporosis: Prevention and Treatment", S				
			n the Treatment and Diagnosis of Osteoporosis",		537, 199	9	
			es to Bone Diseases", Science, 289:1508-1514, for the Intracellular Delivery of Genetic Drugs", A		e Biolog	y. 16:1	129-
	140 1999					,,	
			es, Problems, and Prospects*, Nature, 389:239-2 Nature, 392:25-30, 1998	42, 199/			
$-\Psi$			ne Transfer", <i>Drugs</i> , 60:249-271, 2000				
	**************************************			<del></del>			

Examiner	Celine Qian Otto Gene Old October State Old October Ol	Date	
Signature	Delic 2006.09.03 12:32:28 -04/00"	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

•				(O ) F &		\. ·-			
Substitute for form 14	49A/PTO & 14	149B/PTO	1			19	Сол	plete if Known	
	SE	COND	1	JUL 2 1 20		pplicat	ion Number	10/731,739	
INFORMATION DISCLOSURE				Ş	ing Da	ite	December 10, 2003		
STAT	EMENT	BY APP	·LI	MITOENA	뾧	irst Nar	ned Inventor	John P. CARULLI et al.	·
		sheets as neces		· inite		Examine	r Name	Unassigned	
Sheet	1	of		1	1	Attorney	Docket Number	032796-217	

	U.S. PATENT DOCUMENTS								
Examiner Document Kind Code Initials Number (if known)		Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)					
CQ	09/544,398		Carulli et al.	04-05-2000					
	09/543.771		Carulli et al.	04-05-2000					
	09/578.900		Carulli et al.	05-26-2000					
	10/240,851		Carulli et al.	10-04-2002					
	10/680,287		Askew et al.	10-08-2003					
	10/477,173		Allen et al.	11-10-2003					
	10/477,238		Babij et al.	04-12-2004					
	10/731,739		Carulli et al.	12-10-2003					
	10/834,377		Carulli et al.	04-29-2004					

Examiner i	Document	Kind Code		Date of Publication	Trans	alion
Initials	Number	(if known)	Country	(MM-DD-YYYY)	Yes	No
CQ	WO 00/58496	Α	PCT	10-05-2000		
CQ	WO 01/92891	Α	PCT	12-06-2001		
					ļ	
					<u> </u>	
					ļ	
1					<u> </u>	

	NON-PATENT LITERATURE DOCUMENTS							
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.							
CQ	European Search Report dated May 4, 2004							

	lly signed by Celine Qian	
Examiner   Celine Qian'		ate
/ · · · · · · · · · · · · · · · · · · ·	Positine sisn@uspto gov 2006.08.03.12.30.15-04/07 CO	considered

## Substitute for form 1449A/PTO & 1449B/PTO Complete if Known 10/731,7391 **Application Number THIRD INFORMATION DISCLOSURE** December 10, 2003 Filing Date STATEMENT BY APPLICANT John P. CARULLI et al. First Named Inventor Celine X. Qian **Examiner Name** (use as many sheets as necessary) 032796-217 of **Attorney Docket Number**

	<b>12</b>				
OCT	0 5 2004 2	1	·	J.S. PATENT DOCUMENTS	
	Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
' '1	ADELL				
		<del></del>			

		FC	DREIGN PATENT DO	CUMENTS							
, ,							ST	ATUS			
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec
									-		-
									-		-

	NON-PATENT LITERATURE DOCUMENTS
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
CQ	Gong et al., "LDL Receptor-Related Protein 5 (LRP5) Affects Bone Accrual and Eye Development," Cell 107, pp. 513-523, Cell Press, Cambridge, Massachusetts, 2001.
	Magoori et al., "Severe Hypercholesterolemia, Impaired Fat Tolerance, and Advanced Atheroscleroisis in Mice Lacking Both Low Density Lipoprotein Receptor-related Protein 5 and Apolipoprotein E*," The Journal of Biological Chemistry 278(13) pp. 11331-11336, The American Society for Biochemistry and Molecular Biology, Inc., Baltimore, Maryland, 2003.
	Boyden et al., "HIGH BONE DENSITY DUE TO A MUTATION IN LDL-RECEPTOR-RELATED PROTEIN 5," The New England Journal of Medicine 346(20), pp. 1513-1521, Massachusetts Medical, Boston, Massachusetts, 2002.
	Van Wesenbeeck et al., "Six Novel Missense Mutations in the LDL Receptor-Related Protein 5 (LRP5) Gene in Different Conditions with an Increased Bone Density," Am. J. Human. Genet., 72, pp. 763-771, The University of Chicago Press, Chicago, Illinois, 2003.
	Little et al., "A Mutation in the LDL Receptor-Related Protein 5 Gene Results in the Autosomal Dominant High-Bone-Mass Trait," Am. J. Hum. Genet., 70, pp. 11-19, The University of Chicago Press, Chicago, Illinois, 2002.
	Babij et al., "High Bone Mass in Mice Expressing a Mutant LRP5 Gene," Journal of Bone and Mineral Research, 18, pp. 960-974, Mary Ann Liebert, New York, 2003.
	Mizuguchi et al. "LRP5, low-density-lipoprotein-receptor-related protein 5, is a determinant for bone mineral density," J. Hum. Genet. 49, pp. 80-86, Springer Verlag, Tokyo, Japan, 2004.
V	International Search Report dated August 10, 2004.

Examiner	Celine Qian; DN: carCeltre Glan, GrUS, OrUSPTO,	Date	·
Signature	Osta: 2006.08.03 12:28:29 -04'00'	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Sheet 1 of 1							
Form PTO-14	149			1			
				DOCKET NO.	47038.0217	APPLN.	NO. 10/731,73
U.S. Department of Commerce  Date Filed: November 2, 2005			APPLICANT: John P. Carulli et al.				
							2 2005 🖁
<i>E</i> /		U.	S. PATENT	DOCUMENTS	S		
Examiner	Document Number	Date		Name	Class	Subclass	Filing Date in appropriate
CQ	2003/0219793	11/27/2003	Carulli et	al.			приорише
1	2004/0038860	02/26/2004	Allen et a	ıl.			
	6,770,461	08/03/2004	Carulli et	al.			
	6,780,609	08/24/2004	Carulli et	al.			
$\overline{\Psi}$	2005/0196349	09/08/2005	Wu et al.	·		<del></del>	
				=			
	<u></u>	FORI	EIGN PATI	ENT DOCUME	NTS		<u> </u>
	Document Number	Date		Country	Class	Subclass	Translation Yes/No/Abstra
	WO 02/092000 A2	11/21/2002	PCT	Country	Class	Succiass	Abstract
CQ							
							-
		·				+ #-	
	OTHER D	OCUMENTO	(Including	Author, Title. De	ate, Pertinent Pag	es, etc.)	1
CQ CA		Gene for High	Bone Mass,	"Endocrinologis	t, vol. 12, no. 5, 2	002, pp 445	-453, Lippincott
СВ	Search Report issued in European Patent Application EP 02746370.						
_			<del></del>				
			<del></del>	. <u>.                                   </u>			
	Celine Qi	Olgitudy eigned by Coline Clan Ont cre-Caline Clan, cruS, ce					
Examiner Si	gnature:	Duto: 2008.08.03 12:26:14 -04	w-		Date Conside	ered:	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s). PTO-1449.doc